

## Allen County

### Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

6/8/2018

Using the most recent IMPLAN data available (2016) adjusted for 2018, 19 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Allen County economy.<sup>1</sup>

These 19 sectors have a total direct output of approximately **\$293.3 million** and support **1,078 jobs** in Allen County. Running the model for all 19 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Allen County Economy						
Impact Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>	Output % of Gross Regional Product
Direct Effect	1077.8	12.85%	\$52,721,847	10.57%	\$293,303,310	58.79%
Indirect Effect	166.2	1.98%	\$14,312,396	2.87%	\$29,349,588	5.88%
Induced Effect	130.0	1.55%	\$9,456,406	1.90%	\$17,176,423	3.44%
Total Effect	1373.9	16.38%	\$76,490,649	15.33%	\$339,829,321	68.12%

As shown in the above table, agriculture, food, and food processing sectors support **1,374 jobs**, or **16.38%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$339.8 million**, roughly **68.12% of the economy**.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 19 agriculture, food, and food processing sectors is approximately **\$76.5 million**, or **15.33% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **15.33% of the total economy**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting:

[http://www.implan.com/index.php?option=com\\_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70](http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70)

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

<sup>5</sup> Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **525 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Allen County.

<b>Top Ten Agriculture, Food, and Food Processing Sectors by Employment</b>		
<b>Sector</b>	<b>Total Employment</b>	<b>Total Output</b>
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	524.8	\$40,260,096
Confectionery manufacturing from purchased chocolate	373.6	\$128,490,295
All other crop farming	48.1	\$2,454,937
Wholesale trade	40.1	\$8,362,595
Grain farming	37.4	\$9,180,864
Real estate	21.7	\$4,275,533
Oilseed farming	19.4	\$13,589,729
Truck transportation	18.6	\$3,087,587
Soybean and other oilseed processing	18.4	\$82,827,846
Veterinary services	15.8	\$1,550,280

The confectionery manufacturing from purchased chocolate sector directly contributes approximately **\$128.5 million** to the Allen County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

<b>Top Ten Agriculture, Food, and Food Processing Sectors by Output</b>		
<b>Sector</b>	<b>Total Employment</b>	<b>Total Output</b>
Confectionery manufacturing from purchased chocolate	373.6	\$128,490,295
Soybean and other oilseed processing	18.4	\$82,827,846
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	524.8	\$40,260,096
Oilseed farming	19.4	\$13,589,729
Grain farming	37.4	\$9,180,864
Wholesale trade	40.1	\$8,362,595
Farm machinery and equipment manufacturing	11.9	\$5,688,372
Animal, except poultry, slaughtering	7.5	\$5,074,455
Real estate	21.7	\$4,275,533
Owner-occupied dwellings	0.0	\$3,499,304

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Allen County economy.

<b>All Agriculture, Food, and Food Processing Sectors</b>		
<b>Sector</b>	<b>Total Employment</b>	<b>Total Output</b>
Oilseed farming	19.4	\$13,589,728.58
Grain farming	37.4	\$9,180,864.49
Vegetable and melon farming	0.2	\$47,102.12
Tree nut farming	0.3	\$43,697.74
Greenhouse, nursery, and floriculture production	0.4	\$52,435.44
All other crop farming	48.1	\$2,454,937.26
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	524.8	\$40,260,095.55
Dairy cattle and milk production	7.2	\$2,760,722.29
Poultry and egg production	0.2	\$146,499.79
Animal production, except cattle and poultry and eggs	4.5	\$393,399.08
Commercial logging	0.8	\$37,846.80
Commercial hunting and trapping	1.7	\$34,082.40
Soybean and other oilseed processing	18.4	\$82,827,845.63
Confectionery manufacturing from purchased chocolate	373.6	\$128,490,294.98
Animal, except poultry, slaughtering	7.5	\$5,074,455.35
Bread and bakery product, except frozen, manufacturing	5.1	\$621,929.40
Frozen cakes and other pastries manufacturing	0.3	\$48,721.23
Farm machinery and equipment manufacturing	11.9	\$5,688,372.49
Veterinary services	15.8	\$1,550,279.81

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Allen County, the retail sector was omitted.